

UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office

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APPLICATION NO.	FILING DATE	FIRST NAM	IED INVENTOR		ATTORNEY DOCKET NO.
Ø8/862,192	0 5/23/97	SKOLNICK		J	07300/034001
-		LM61/0304	٦		EXAMINER
JOHN LAND		me sim a se and mage as		DOWNS,	R
FISH AND RI 4225 EXECUT				ART UNIT	PAPER NUMBER
SUITE 1400	TAT OCCUPIE	*	, .	2762	
LA JOLLA CA	92037			DATE MAILED:	03/04/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks



Notice of Allowability



Application No.

08/862,192

Applicant(s)

SKOLNICK ET AL.

Examiner

Robert W. Downs

Group Art Unit 2762



All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance and Issue Fee Due or other appropriate communication will be mailed in due course.
★ This communication is responsive to Amendment filed 12/21/98 ★ This communication is responsive to Amendment filed 12/21/98
∑ The allowed claim(s) is/are 1-21
☐ The drawings filed on are acceptable.
☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
received.
received in Application No. (Series Code/Serial Number)
received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
*Certified copies not received:
Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
A SHORTENED STATUTORY PERIOD FOR RESPONSE to comply with the requirements noted below is set to EXPIRE THREE MONTHS FROM THE "DATE MAILED" of this Office action. Failure to timely comply will result in ABANDONMENT of this application. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).
☐ Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL APPLICATION, PTO-152, which discloses that the oath or declaration is deficient. A SUBSTITUTE OATH OR DECLARATION IS REQUIRED.
Applicant MUST submit NEW FORMAL DRAWINGS
$\Box_{ar{b}}^{rac{1}{2}}$ because the originally filed drawings were declared by applicant to be informal.
The cluding changes required by the Notice of Draftsperson's Patent Drawing Review, PTO-948, attached hereto or to provide the paper No5
including changes required by the proposed drawing correction filed on, which has been approved by the examiner.
including changes required by the attached Examiner's Amendment/Comment.
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the reverse side of the drawings. The drawings should be filed as a separate paper with a transmittal lettter addressed to the Official Draftsperson.
☐ Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.
Any response to this letter should include, in the upper right hand corner, the APPLICATION NUMBER (SERIES CODE/SERIAL NUMBER). If applicant has received a Notice of Allowance and Issue Fee Due, the ISSUE BATCH NUMBER and DATE of the NOTICE OF ALLOWANCE should also be included.
Attachment(s)
Notice of References Cited, PTO-892
Information Disclosure Statement(s), PTO-1449, Paper No(s).
Notice of Draftsperson's Patent Drawing Review, PTO-948
Notice of Informal Patent Application, PTO-152
☐ Interview Summary, PTO-413
Examiner's Amendment/Comment
Examiner's Comment Regarding Requirement for Deposit of Biological Material
X Examiner's Statement of Reasons for Allowance

Application/Control Number: 08/862,192

Art Unit:

REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance: Use of the backpropagation algorithm with medical data as in the present invention would not have been obvious to one of ordinary skill in the art over the admitted prior art stated in the specification. The backpropagation algorithm, as admitted in the specification on pages 5 and 6, was a known approach to pattern classification. Page display analysis has been used to identify MHC class II molecule binding peptides (specification, page 6: reference to data obtained from Dr. D.P. Smith). Page display libraries were known (specification, page 6, statement in last paragraph). However, the analysis for identifying class II molecule binding peptides did not determine relative binding affinities of the molecules; thus there is no motivation to predict relative binding affinities of peptide molecules. Furthermore, the data used for training the neural network to predict relative binding affinities of molecules were not previously known but were obtained by analysis for purposes of the invention (specification, page 6, last paragraph).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit:

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Downs whose telephone number is (703) 305-9642.

RWD March 1, 1999

ROBERT W. DOWNS PRIMARY EXAMINER

Robert W. Down



NOTICE OF ALLOWANCE AND ISSUE FEE DUE

LM61/0304

JOHN LAND FISH AND RICHARDSON 4225 EXECUTIVE SQUARE SUITE 1400 LA JOLLA CA 92037

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	First Named Applicant SKOLNICK,		. 35	USC 154(b) term ext. =	Ø Days	5 e

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THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED.

THE ISSUE FEE MUST BE PAID WITHIN <u>THREE MONTHS</u> FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. <u>THIS STATUTORY PERIOD CANNOT BE EXTENDED.</u>

HOW TO RESPOND TO THIS NOTICE:

1.5

- I. Review the SMALL ENTITY status shown above. If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:
 - A. If the status is changed, pay twice the amount of the FEE DUE shown above and notify the Patent and Trademark Office of the change in status, or
 - B. If the status is the same, pay the FEE DUE shown above.
- If the SMALL ENTITY is shown as NO:
- A. Pay FEE DUE shown above, or
- B. File verified statement of Small Entity Status before, or with, payment of 1/2 the FEE DUE shown above.
- II. Part B-Issue Fee Transmittal should be completed and returned to the Patent and Trademark Office (PTO) with your ISSUE FEE. Even if the ISSUE FEE has already been paid by charge to deposit account, Part B Issue Fee Transmittal should be completed and returned. If you are charging the ISSUE FEE to your deposit account, section "4b" of Part B-Issue Fee Transmittal should be completed and an extra copy of the form should be submitted.
 - III. All communications regarding this application must give application number and batch number.

 Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

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Box ISSUE FEE Assistant Commissioner for Paten Washington, D.C. 20231

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The COMMISSIONER OF PATENTS	AND TRADEMARKS IS rec	quested to apply the is	sue Fee to the ap	plication identified above.		
(Authorized Signature)	and	(Date 6-	4-99			
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4 or agent; or the assignee or other part	y.in interest as shown by th	ne records of the Pater	t and			210.00 GP
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